

SENSITRON **SEMICONDUCTOR**

1N6761-1/N6761UR-1
1N6824-1/1N6824UR-1

TECHNICAL DATA **DATASHEET 4244, Rev-**

SCHOTTKY FAST SWITCHING DIODES

Sensitron's Power Semiconductor Products have been used in space, military and high-rel applications for more than 30 years. Our 100V Schottky fast switching diodes, 1N6761-1/UR-1 & 1N6824-1/UR-1, are available in both axial and melf packaging. We also supply 100V Schottky die products.

Applications / Markets:

- ▼ Switching power supply
- ▼ Converters
- ▼ Free-Wheeling Diodes
- ▼ Polarity protection diode
- ▼ High-rel industrial
- ▼ Military
- ▼ Aerospace
- ▼ Space/satellites

Features / Benefits:

- ▼ Ultra-low reverse leakage current
- ▼ Soft Reverse Recovery at Low and High Temperature
- ▼ Very Low Forward Voltage Drop
- ▼ Low Power Loss, High Efficiency
- ▼ High Surge Capacity
- ▼ Guaranteed Reverse Avalanche Characteristics
- ▼ Outperforms 100 Volt Ultra Fast Rectifiers
- ▼ Hermetic, non-cavity glass package
- ▼ Metallurgically bonded
- ▼ Screening to TX, TXV, S levels available

All ratings are at $T_A = 25^\circ\text{C}$ unless otherwise specified.

RATING		SYMBOL	CONDITIONS	MIN	MAX	UNIT
Peak Inverse Voltage		VRWM	←	-	100	Vdc
Average DC Output Current (I_o)		I_o	↑	-	1.0	Amps
Peak Single Cycle Surge Current (I_{FSM})		IFSM	$t_p = 8.3 \text{ ms}$ Half Sine Wave,	-	25	Amps(pk)
CHARACTERISTIC			CONDITIONS	MIN	MAX	UNIT
Maximum Forward Voltage	6761	V_f	$I_F = 0.1\text{A}$ (300 μsec pulse, duty cycle < 2%)	-	0.38	Volts
Maximum Forward Voltage	6824 6761	V_f	$I_F = 1.0\text{A}$ (300 μsec pulse, duty cycle < 2%)	-	0.49 0.69	Volts
Maximum Instantaneous Reverse Current At Rated VRWM	6824 6761	I_r	$T_A = 25^\circ\text{C}$ $V_R = 100\text{V}$ $T_A = 100^\circ\text{C}$	-	10 100	μAmps
Junction Capacitance (C_J)	6824 6761		$V_R = 5 \text{ Vdc}$	-	40 70	pF



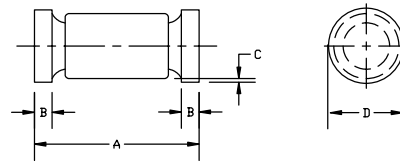
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PACKAGE DIMENSIONS

Axial



MELF



SCHOTTKY BARRIER

PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	ØB	ØD	G	L
DO-41	.028/.034 0.71/0.86	.08/.107 2.03/2.72	.160/.205 4.06/5.21	1.00/1.30 25.4/33.02

SCHOTTKY BARRIER

PACKAGE STYLE	DIMENSIONS - INCHES (MILLIMETERS)			
	A	B	C	D
DO-213AB	.189/.205 4.80/5.21	.016/.022 0.41/0.56	0.001 Min 0.03 Min	.094/.105 2.39/2.67

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